

The scientific level of Spain in Biotechnology is by the quality and quantity of its scientists and research centres, comparable to the best in Europe^{38, 39}. There is, however, a considerable gap between the fundamental and applied level of Spanish biotechnology as until recently the private sector failed to see the benefits brought about by innovation through guidance and funding of Spanish and EC agencies. An additional reason for concern is the potential shortage of Spanish engineers and applied scientists. Spanish engineering programs tend to be highly demanding with stringent entrance examinations and heavy work loads. Present enrolment in science and engineering, however, is insufficient for the requirements of the impending single European market.

G. INTELLECTUAL PROPERTY IN SPAIN

The legislation of intellectual property in Spain is based on the Patent Law (Ley 11/1986) of March 20, 1986, the Trade Marks Law (Ley 32/1988) of November 10, 1988 and the Law of topography for semiconductors (Ley 11/1988). In addition, Spain is a signatory of the Paris Union Convention for the Protection of Industrial Property, of the Munich Convention of October 7, 1973, of the European Patent Agreement in 1986, and of the Patent Cooperation Treaty (PCT).

Spain is a signatory of the 1977 Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure, and it has requested from the world Organization for Intellectual Property, the granting of official statute of International Authority of Deposit of Microorganisms.

The Munich Convention implies patent protection to any applicant of a EC country not only within the European Community but also this protection is extended to non members like Sweden, Switzerland, Austria and Liechtenstein. The Patent Cooperation Treaty extends the protection of an invention to the 42 countries signatory members.

Patents are granted by the Industrial Property Registry (Registro de la Propiedad Industrial) for a period of 20 years and are not renewable thereafter. Trademarks must be registered to be legally protected. They are registred for a 20-year period and are renewable. Copyright belongs to the author until his death and to his heirs for 60 years thereafter.

As stated earlier Spain is a net importer of technology. In 1990, 120 patents in biotechnology were filed which represents 1.1 % of the total number of